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10/017,853	12/14/2001	Charles William Craft	044123-1634	9598

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EXAMINER

HARRIS, ERICA B

ART UNIT

PAPER NUMBER

3634

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/017,853

Applicant(s)

CRAFT ET AL.

Examiner

Erica B Harris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |                                                                                                              |                                                                             |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it includes the phrase "is disclosed," which can be implied as "The disclosure concerns," which should be avoided. Line 1 of the abstract, "A shelving system is disclosed. The shelving system includes" should be --A shelving system includes--. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities:

in paragraph 0005, lines 1-2, "To provide an inexpensive, reliable, and widely adaptable beam structures" should be --To provide an inexpensive, reliable, and widely adaptable beam structure--;

in paragraph 0041, line 10, "sockets 22" should be --sockets 22b--;

in paragraph 0042, line 3, "ribs 34 are generally perpendicular and/or parallel to beams 28 or 30" should be --ribs 34 are generally perpendicular to beams 28 or 30--;

in paragraph 0043, lines 6-7, "upper side 46 of upper end 42, at least partially,

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comprise support surface 24” should be -- upper side 46 of upper end 42,  
at least partially, comprises support surface 24--;

line 9, “intermediate wall 40 generally not perpendicular” should be  
--intermediate wall 40 is generally not perpendicular--;

in paragraph 0045, line 1, “FIGURE 9, adjacent “Z”-shaped members 38”  
should be --FIGURE 11, adjacent “Z”-shaped members 38-- because  
reference number “38” is not in Figure 9;

in paragraph 0046, lines 10-11, “lower ends wall thickness of ends and project”  
should be --lower ends project--;

in paragraph 0048, line 5, “outer wall 58 at sockets 22a are intended” should be  
--outer wall 58 at sockets 22a is intended--;

in paragraph 0053, line 2, ““Z”-shaped beams 76 is shown” should be --“Z”-  
shaped beams 76 are shown--;

lines 4-5, “height HH2 an intermediate” should be --height HH2 and an  
intermediate--; and

in paragraph 0054, line 4, “preferred embodiment, plurality of ribs” should be  
--preferred embodiment, a plurality of ribs--.

Appropriate correction is required.

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “12a or 12b” has been used to designate both a shelf and a post, both in Figure 1.

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5. The drawings are objected to because

in Figure 1, the lead lines from reference number "14", along the right side of the shelving system, should end in arrows because they denote a feature that is further defined by additional reference numbers; it is unclear what feature reference number "14," at the center of the front edge of the bottom of the system, is identifying because the rear post would not extend to that point; and

in Figure 2, "reference number "24" should only appear once and that instance should have a lead line that ends in an arrow.

6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

7. Claims 1, 12, and 16 are objected to because of the following informalities:

in claim 1, line 1, "one or more posts" should be --at least one post--;

in claim 12, line 2, "wherein second aperture is" should be --wherein said second aperture is--;

line 3, "larger than first aperture" should be --larger than said first aperture--;

in claim 16, line 2, "one or more posts" should be --at least one post--;

line 4, "one or more posts" should be --at least one post--; and

line 5, "one or more posts" should be --at least one post--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2, 3, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 2, recites the limitation "the support surface" in line 2. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 3 recites the limitation "the support surface" in line 2. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 15 recites the limitation "the height" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined

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was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

14. Claims 1-13, 15, 16, and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Houk, Jr. et al. (6,079,339). In Figures 1 and 3-6, Houk, Jr. discloses a shelving system comprising a panel 12,22 having a plurality of support structures; and at least one post 14,16,18,20 configured to support the panel. Each support structure includes a pair of opposing beam members 64,66,68,70,72 having an upper end, a lower end, and an intermediate wall 74a-e coupling the upper and lower ends, wherein the upper and lower ends of opposing beam members define a plurality of orifices 76a-e,78a-d and a terminal end 84,86 of the upper end includes a downward projection configured to provide strength and rigidity to the panel. The projection is configured to provide a smoother surface without additional finishing operations after the panel is molded. The intermediate wall 74 is both generally vertical and angled relative to the support surface of the panel, lying in a plane that is approximately perpendicular to said surface. Beam members from adjacent support structures form alternating "Z"-shaped members across the width of the support structure and form a continuous support along the length of the support structure. The upper and lower end of the beam members have approximately 50% larger wall thickness than the intermediate wall and extend out from the intermediate wall by approximately 100% of the wall thickness, as shown in Figure 6. Figure 6 also illustrates that the height of the intermediate wall 74 varies depending on its proximity to the ends of the support structure with the height being greatest at the center of the structure. Each beam member 64,66,68,70,72 has a curvilinear parabolic shape with a vertex 90 approximately in the middle of

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the beam member, see Figure 5, wherein the plurality of support structures includes inner support structures 88 and outer support structures, wherein the outer support structures have a continuous height and the inner support structures have a curved configuration. The orifices of the beam members are defined as a first cavity 78a-d formed by the side walls and the upper wall and a second cavity 76a-e formed by the side walls and the lower wall, wherein the second aperture is larger than the first aperture to maximize the support surface and minimize the weight and material without reducing flexural strength.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houk, Jr. et al. as applied to claims 1-13, 15, 16, and 19-21 above, and further in view of Welsch et al. (4,843,975). All of the limitations of these claims have been disclosed above by Houk, Jr. with the exception of the support structures having a constant height across the length of the panel. Welsch, in Figures 1, 3, 4, and 6, discloses a shelf panel 12 having a plurality of support structures 22, each said support structure having a constant height across the length of the panel. To one of ordinary skill in the art at the time the invention was made, it would have been obvious to construct the support structures of Houk, Jr. et al. of a constant height across the length of the



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panel, as taught by Welsch, in order to reduce the amount of tooling required to manufacture the panel thereby reducing the cost of manufacturing said panel.

*Conclusion*

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica B Harris whose telephone number is 703-306-9071. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P Stodola can be reached on 703-308-2686. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3597 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.

*Erica B. Harris*

Erica B. Harris  
December 16, 2002

*Daniel P Stodola*

DANIEL P. STODOLA  
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